



National Aeronautics and  
Space Administration  
Goddard Space Flight Center

# Inside Wallops

Wallops Flight Facility, Wallops Island, Virginia

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## ***Pioneer 10 Mission Ends***

Traveling 6.2 billion miles from Earth and its power weakening, flight controllers at the Ames Research Center ceased communications with the Pioneer 10 spacecraft March 31.

Pioneer 10, launched on March 2, 1972, was the first spacecraft to travel through the asteroid belt and explore the outer solar system, the spacecraft to visit Jupiter, the first to use a planet's gravity to change its course and to reach solar-system-escape velocity, and the first spacecraft to pass beyond the known planets.

"Pioneer 10 exemplifies the American pioneering spirit of exploration far beyond the frontier," said Dr. Wesley t. Huntress, Jr., Associate Administrator for Space Science. "Not only has it made many major scientific discoveries in the far reaches of space, we're proud that it has managed to stay alive almost ten times longer than the original mission called for, a tribute to the designers and builders at TRW, and the operators at NASA's Ames Research Center," he said.

What had been planned as a two-year mission to Jupiter, Pioneer 10 is now so far away that its radio signal at the time of mission termination, traveling at the speed of light (186,000 miles per second), took nine hours and ten minutes to reach Earth. Currently twice as far from the Sun

as Pluto, Pioneer was returning data about the farthest reaches of the Sun's atmosphere.

Pioneer 10 will have its first "near-star-encounter" in about 30,000 years when it will pass within approximately three light years of the red dwarf star Ross 248 in the constellation Taurus. In the next million years, Pioneer 10 will pass ten stars at distances ranging from three to nine light years, and will probably still be traveling through the Milky Way galaxy when the Sun becomes a red giant and destroys the Earth five billion years from now.

Pioneer 10 carries a message for any intelligent life forms that it might encounter on its trek across the galaxy. A gold-anodized aluminum plaque designed by Dr. Frank Drake and the late Dr. Carl Sagan is bolted to the spacecraft. The plaque's engraving depicts a man and a woman, a map of the Earth's solar system, and other symbols which may help intelligent beings interpret the message and understand something about the spacecraft's creators, and where they lived.

The 570-pound spacecraft carries 11 instruments that have been used to measure magnetic fields, solar wind, high energy cosmic rays, cosmic and asteroidal dust and Jupiter's ultraviolet and infrared radiation. At the conclusion of the mission, only one of the 11 instruments was working.

## ***Second Comet Payload Successful***

The second of four payloads to examine Comet Hale-Bopp was successfully flown on a NASA sounding rocket on March 30 from the White Sands Missile Range, NM.

The payload, for Alan Stern from Southwest Research Institute in Boulder, CO, was designed to examine the coma and tail in the far-ultraviolet wavelength of light. The payload instrument was a precursor to one being developed to fly on a NASA comet mission in 2003 called Rosetta.

The payload flew to an altitude of 195 miles and was recovered. The project manager was Anel Flores (Code 832).

The final two payloads to examine Hale-Bopp were scheduled for April 5 and 7.

## ***Goddard Refocusing Briefing Set***

A briefing to update all Wallops civil service and contractor employees on the status of the Goddard reorganization and the Wallops Mission 2000 is scheduled for 2 p.m., Thursday, April 10, in Building D-10.

During the presentation, Arnold Torres, director of Suborbital Projects and Operations, will discuss the impact on Wallops employees of new work coming to Wallops and of organizational changes planned for both Greenbelt and Wallops. A question and answer period will follow the presentation.

These changes will place Wallops on a new course. They will provide enormous opportunities for both our workforce and the surrounding community. We will expand our horizons to include both suborbital and orbital activities. We will become a leader in partnering with the Department of Defense and commercial enterprises. Wallops will be placed on a course of stability and vitality.

All employees are encouraged to attend this briefing and to become active participants in the future of Wallops.

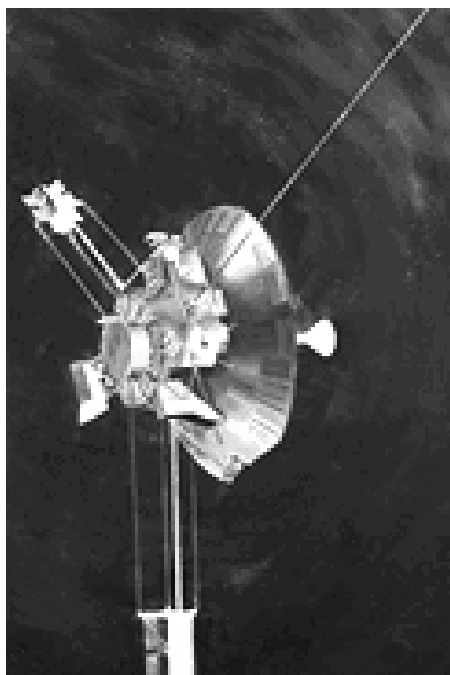
## ***Visitor Center Schedules Events***

The Sun and space flight are the subjects of two special events scheduled at the NASA Visitor Center during April.

"Solar Power," a program for children in kindergarten through grade three, will be held at 11:30 a.m., April 19. This 30-minute program explores our Sun and its energy. Children will make images on photosensitive paper. Materials will be provided by the Visitor Center.

"Puppets in Space," a 10-minute puppet show, is being presented at 11 a.m. and 2 p.m. every Saturday and Sunday during April. Puppet astronauts and Sam the monkey will explore space flight, including the space suit. Following the puppet show, Visitor Center staff will demonstrate the space suit and answer questions from the audience.

The Visitor Center is open from 10 a.m. to 4 p.m., Thursday through Monday. For further information, please call x2298.



*Communications with Pioneer 10, a trailblazer among planetary spacecraft, were discontinued on March 31. The spacecraft continues its journey through the Milky Way galaxy with a plaque attached depicting its creators and origination, for any intelligent life forms that may encounter it.*

**Monthly Weather  
Summary**  
*by Jim Buchanan, Meteorologist*

March roared in like a lion, with strong winds throughout the entire month. Maximum winds of 30 mph or more were recorded on 18 days during the month. Winds of 40 mph or greater were recorded on seven of those days. At the end of the month, a late season “Nor’easter” developed off the Virginia coast and moved slowly toward New England resulting in winds of 50 mph for this area. There were only three days during the month when the maximum wind was below 20 mph. The average maximum wind for March was 32 mph.

With much of the wind coming from the south and west, our mild winter conditions made for a very pleasant transition into spring. Two new record high temperatures were set. Temperatures of 75 and 73 degrees Fahrenheit were recorded on March 2 and 22, topping the old records of 68 degrees on March 2 and 67 degrees on March 22. Readings below freezing were taken on five days with the coldest temperature of 25 degrees recorded on March 17. The average temperature for March was 48 degrees which is 3 degrees above average.

Along with the warm winds came an abundance of moisture, including a trace of snow on March 31. There was a little over four inches of rainfall, which is .7 of an inch above normal. There was measurable precipitation on 12 days of the month. March 3 registered the greatest amount in a 24 hour period with a total of 1.18 inches.

The warming glory of spring will be fully felt during May. The average daily temperature should rise from 58 degrees at the first of the month to 68 degrees by the end of May. The average temperature for May is 62 degrees, which is over 9 degrees warmer than the average for April. These comfortable temperatures can still be interrupted with low temperatures near freezing and highs over 90 degrees. The coldest reading for May is 34 degrees which was taken in 1974. The record high is 97 degrees recorded in 1991.

May is usually an average month for rainfall with a typical total of 3.23 inches and 10 days of measurable precipitation.

With warmer weather and outdoor activities increasing, be sure to drink plenty of fluids, use sunscreen and don’t over exert yourself in the heat. Now is the time to begin preparing hurricane emergency kits and reviewing safety plans. The hurricane season officially starts June 1.

***The next issue of Inside Wallops will be April 21.***



*Officers for the Wallops Exchange and Morale Association (WEMA) Executive Council are left to right: Robert Nock, Chairperson; Linda Layton, Vice-chairperson; Frank Voss, Exchange Manager; Betty Flowers, Secretary; Jan Neville, Morale Activities Committee (MAC) Chairperson; and Sandra Savage, Financial Manager. Photo by Tom Burton.*

***Wallops Employees On  
the Road***

Pam Pittman (Code 822), Debbie Parks (Code 833), and Jeanette Smolinski (CSC) participated in a Career Fair at Arcadia High School on March 5.

Betty Flowers (Code 130) represented Wallops at Northampton High School Career Fair on March 5.

Steve Raque (Code 834) spent the day with Snow Hill High School physics, calculus and trigonometry students on March 17.

John van Kleef (AlliedSignal) visited Belle-Craft Pre-school on March 18.

Lisa Johnson (Code 113) and Jack Vieira (Code 832) participated in the Pocomoke High School Career Fair on March 19.

Rhonie Chamberlain (CSC) visited the eighth grade science classes at Pittsville Middle School on March 20.

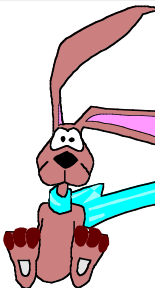
***Focus on the  
Future Day  
May 21***

**Ping Pong Tournament**  
**April 9 -- 5 p.m. -- Bldg. F-3**  
**AEGIS vs NASA**

**Name that Tune** originally scheduled for April 9 has been postponed -- sorry! A new date will be announced.

**Oscar DeLa Hoya vs  
Pernell Whitaker**  
**April 12 -- 8 p.m.**  
**Bldg. F-3**

**Mike Tyson vs  
Evander Holyfield**  
**May 3 -- 8 p.m.**  
**Bldg. F-3**



A word of thanks and an apology to .....  
**Audrey Young** and to any others whose names were omitted in the list of Easter Egg Hunt volunteers.

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